

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors:	Kurt E. Spears, et al.	Examiner:	Houshang Safaipoor
Serial No.:	10/634,973	Group Art Unit:	2625
Filed:	August 5, 2003	Docket No.:	10019217-1
Title:	Scanning Method and System		

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is filed in response to the Final Office Action mailed December 1, 2008 and Notice of Appeal mailed March 3, 2009.

AUTHORIZATION TO DEBIT ACCOUNT

It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Hewlett-Packard Development Company's deposit account no. 08-2025.

I. REAL PARTY IN INTEREST

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

II. RELATED APPEALS AND INTERFERENCES

There are no known related appeals or interferences known to Appellant, Appellant's legal representative, or assignee that will directly affect or be directly affected by or have a bearing on the Appeal Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1, 4-21, 29, and 31-41 are pending in the application. Claims 2-3, 22-28, and 30 were canceled. Claims 1, 4-21, and 39-41 stand finally rejected; and claims 29 and 31-38 are allowed. The rejection of claims 1, 4-21, and 39-41 is appealed.

IV. STATUS OF AMENDMENTS

No amendments were made after receipt of the Final Office Action. All amendments have been entered.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The following provides a concise explanation of the subject matter defined in each of the claims involved in the appeal, referring to the specification by page and line number and to the drawings by reference characters, as required by 37 C.F.R.

§ 41.37(c)(1)(v). Each element of the claims is identified by a corresponding reference to the specification and drawings where applicable. Note that the citation to passages in the specification and drawings for each claim element does not imply that the limitations from the specification and drawings should be read into the corresponding claim element or that these are the sole sources in the specification supporting the claim features.

Claim 1

An image capture device (Fig. 1C shows a scanner 10), comprising:

a first scanning module (Fig. 1C, # 30a) operable to scan a first side (Fig. 1B, #50a) of an object (Fig. 1B, #50: The scanner has two scanning modules: lines 1-2 of paragraph [0016] on p. 3. In duplex mode, the first scanning module scans one side of the object: lines 1-4 of paragraph [0031] on p. 9);

a second scanning module (Fig. 1C, # 30a) operable to scan a second side (Fig. 1B, #50a) of said object, said first and second scanning modules being independently translatable along their respective displacement paths and being offset from each other along their respective displacement paths during a duplex mode to reduce bleed-through of light through the object (In duplex mode, the second scanning module scans a second side of the object: lines 1-4 of paragraph [0031] on p. 9. Instead of being aligned with each other as the modules move along their respective support rails, the modules are offset from each other along their support rails. The advantage of having the scanning modules offset from each other is that the effect of "bleed-through" of light through medium is reduced or eliminated: lines 1-5 of paragraph [0036] on p. 10.); and

a housing (Fig. 1A, 1B, #12), wherein one of said first and second scanning modules is disposed in said housing (Fig. 1C shows the module 30b located in the housing, and module 30a located in the lid: lines 4-6 of paragraph [0016] on p. 3.).

Claim 18

A method for scanning an object by an image capture device (Fig. 2 shows a method of scanning: lines 1-2 of paragraph [0024] on p. 6. In block 202, transparency mode is selected: line 1 of paragraph [0028] on p. 7.), comprising:

illuminating a first portion of said object by a first scanning module of said image capture device (In block 222, at least a portion of side 50a of object 50 is illuminated by light source 31a: lines 1-2 of paragraph [0033] on p. 9.);

capturing light passing through said first portion by a second scanning module of said image capture device (Photosensitive device 32a is used to capture light reflected from the illuminated portion of side 50a of object 50: lines 2-3 of paragraph [0033] on p. 9.);

illuminating a second portion of said object by the second scanning module of said image capture device (In block 226, at least a portion of side 50b of object 50 is illuminated by light source 31b: lines 1-2 of paragraph [0034] on p. 9.);

capturing light passing through said second portion by the first scanning module of said image capture device (Photosensitive device 32b captures light reflected from the illuminated portion of side 50b of object 50: lines 3-4 of paragraph [0034] on p. 9); and

moving said first and second scanning modules along their respective displacement paths to illuminate the first and second portions of said object (Module 30a is moved along support rail 16a: line 8 of paragraph [0033] on p. 9; and module 30b is moved along support rail 16b: lines 7-8 of paragraph [0034] on p. 10).

Claim 39

An image capture device, comprising:

a first scanning module operable to scan a first side of an object; and

a second scanning module operable to scan a second side of said object, said first and second scanning modules translatable along their respective displacement paths, wherein said first and second scanning modules are synchronously translated along their respective paths in a first mode and translated along their respective paths in a second mode such that positions of their respective paths are not same at any given time.

Claim 40

An image capture device (Fig. 1C shows a scanner 10), comprising:

a first scanning module (Fig. 1C, # 30a) operable to scan a first side (Fig. 1B, #50a) of an object (Fig. 1B, #50: The scanner has two scanning modules: lines 1-2 of paragraph [0016] on p. 3. In duplex mode, the first scanning module scans one side of the object: lines 1-4 of paragraph [0031] on p. 9); and

a second scanning module (Fig. 1C, # 30a) operable to scan a second side (Fig. 1B, #50a) of said object, said first and second scanning modules translatable along their respective displacement paths, wherein said first and second scanning modules are offset from each other along their respective displacement paths to reduce bleed-through of light through the object (In duplex mode, the second scanning module scans a second side of the object: lines 1-4 of paragraph [0031] on p. 9. Instead of being aligned with each other as the modules move along their respective support rails, the modules are offset from each other along their support rails. The advantage of having the scanning modules offset from each other is that the effect of "bleed-through" of light through medium is reduced or eliminated: lines 1-5 of paragraph [0036] on p. 10.).

Claim 41

An image capture device (Fig. 1C shows a scanner 10), comprising:

a first scanning module (Fig. 1C, # 30a) operable to scan a first side (Fig. 1B, #50a) of an object (Fig. 1B, #50: The scanner has two scanning modules: lines 1-2 of paragraph [0016] on p. 3. In duplex mode, the first scanning module scans one side of the object: lines 1-4 of paragraph [0031] on p. 9); and

a second scanning module (Fig. 1C, # 30a) operable to scan a second side (Fig. 1B, #50a) of said object, said first and second scanning modules translatable along their respective displacement paths, wherein in a transparency mode, and one of said first and second scanning modules is farther along its displacement path than another of said first and second scanning modules such that a light source of the first scanning module is aligned with a photosensitive device of the second scanning module (In the transparency mode, both scanning modules are used. Furthermore, one of the scanning modules is farther along its path on its rail than the other scanning module, such that the light of one

of the scanning modules is aligned with the photosensitive device of the other scanning module: lines 1-5 of paragraph [0030] on pages 8-9).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1, 4-17, and 39-41 are rejected under 35 USC § 103(a) as being unpatentable over JP 10-098588 (Hidetoshi) in view of JP 07-254972 (Takashi).

Claims 18-21 are rejected under 35 USC § 101 as not falling within one of the four statutory categories of invention.

VII. ARGUMENT

The rejection of claims 1, 4-21, and 39-41 is improper, and Appellants respectfully request reversal of these rejections.

The claims do not stand or fall together: Instead, Appellants present separate arguments for various independent and dependent claims. Each of these arguments is separately argued below and presented with separate headings and sub-heading as required by 37 C.F.R. § 41.37(c)(1)(vii).

Claim Rejections: 35 USC § 103(a)

Claims 1, 4-17, and 39-41 are rejected under 35 USC § 103(a) as being unpatentable over JP 10-098588 (Hidetoshi) in view of JP 07-254972 (Takashi). These rejections are traversed.

Principles of Law: Claim Construction

During examination of a patent application, pending claims are given their broadest reasonable construction consistent with the specification (see *In re Prater*, 415 F.2d 1393, 1404-05 (CCPA 1969); *In re Am. A cad. a/Sci.Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004)).

Although a patent applicant is entitled to be his or her own lexicographer of terms in a claim, in *ex parte* prosecution the lexicography must be within limits. *In re Carr*, 347 F.2d 578, 580 (CCPA 1965). The applicant must do so by placing such definitions in the specification with sufficient clarity to provide a person of ordinary skill in the art with clear and precise notice of the meaning that is to be construed. *See also In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994) (although an inventor is free to define the specific terms used to describe the invention, this must be done with reasonable clarity, deliberateness, and precision; where an inventor chooses to give terms uncommon meanings, the inventor must set out any uncommon definition in some manner within the patent disclosure so as to give one of ordinary skill in the art notice of the change).

Principles of Law: Obviousness

The test for determining if a claim is rendered obvious by one or more references for purposes of a rejection under 35 U.S.C. § 103 is set forth in *KSR International Co. v. Teleflex Inc.*, 550 U.S. ___, 82 USPQ2d 1385 (2007):

Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. Quoting *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966).

As set forth in MPEP 2143.03, to ascertain the differences between the prior art and the claims at issue, “[a]ll claim limitations must be considered” because “all words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385.

According to the Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in view of *KSR International Co. v. Teleflex Inc.*, Federal Register, Vol. 72, No. 195, 57526, 57529 (October 10, 2007), once the *Graham* factual inquiries are resolved, there must be a determination of whether the claimed invention would have been obvious to one of ordinary skill in the art based on any one of the following proper rationales:

(A) Combining prior art elements according to known methods to yield predictable results; (B) Simple substitution of one known element for another to obtain predictable results; (C) Use of known technique to improve similar devices (methods, or products) in the same way; (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable

results; (E) “‘Obvious to try’”—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success; (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art; (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention. *KSR International Co. v. Teleflex Inc.*, 550 U.S. ___, 82 USPQ2d 1385 (2007).

Furthermore, as set forth in *KSR International Co. v. Teleflex Inc.*, quoting from *In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006), “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasonings with some rational underpinning to support the legal conclusion of obviousness.”

Therefore, if the above-identified criteria and rationales are not met, then the cited reference(s) fails to render obvious the claimed invention and, thus, the claimed invention is distinguishable over the cited reference(s).

Scope and Content of Art and Overview of Claims

As a precursor to the arguments, Appellants provide an overview of the claims and the primary references (Hidetoshi and Takashi). This overview will assist in determining the scope and content of the prior art as required in *Graham* (see *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17-18 setting out an objective analysis for applying 103 rejections).

As discussed in Appellant’s background, some image capture devices are limited to scanning a single side of a paper or object. “These systems require a consumer to manually intervene in the scanning process to scan both sides of a paper or other media” (lines 7-8 of paragraph [0003] on p. 1). For example, after the first scan, the consumer flips the paper over to scan the other side.

Claim 1 is directed to an image capture device (such as a scanner) that includes two scanning modules that operate to scan both sides of an object. The two scanning modules are independently translatable along their respective displacement paths and are offset from each other during scanning. This offset reduces the amount of light that bleeds-through the object.

Hidetoshi teaches a scanner with two carriages 5a and 5b that scan two sides of an object. Both carriages are simultaneously moved together to scan the object.

Takashi teaches a scanner that has two scanning parts (3 and 5) that irradiate light to an object. The first scanning part irradiates lights from an upper part to the object, and the second scanning part irradiates light from a lower part to the object. Transparent or reflected light is used to generate a scan.

Differences Between the Art and Claims

Each of the independent claims recites one or more elements that are not taught or suggested in Hidetoshi in view of Takashi. These missing elements show that the differences between the combined teachings in the art and the recitations in the claims are great. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art.

These differences are shown below and presented with separate headings for different claim groups.

Sub-Heading: Claims 1 and 4-17

As one example, claim 1 recites that the first and second scanning modules are independently translatable along their respective displacement paths. Hidetoshi teaches a scanner with two carriages 5a and 5b and states that both carriages are simultaneously moved to scan the object. Hidetoshi, however, never teaches or even suggests that both carriages independently move along their displacement paths. In fact, Hidetoshi provides an advantage that both carriages move at the same time to shorten the read time (see Abstract discussing the problem to be solved and the solution). For example, Hidetoshi discusses how both the first carriage 5a and the second carriage 5b move together to perform the scan. These two carriages start and stop at the same time. The first carriage

reaches its end point at the same time the second carriage reaches its end point. These two carriages are not independently translatable along the displacement paths.

The differences between the claims and the teachings in the art are great since the references fail to teach or suggest all of the claim elements. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art.

For at least these reasons, the claims are allowable over the art of record.

As another example, claim 1 recites that the first and second modules are offset from each other along their respective displacement paths during a duplex mode to reduce bleed-through of light through the object. Neither Hidetoshi nor Takashi teach or even suggest offsetting the modules to reduce bleed-through of light through an object.

The examiner argues that Hidetoshi teaches a means to prevent back projection. Appellants respectfully disagree. The back projection means discussed in Hidetoshi is used to read the surface of the object (for example, read the surface of a paper document being scanned). This back projection means is not related to reducing bleed-through of light through the object. By contrast, the back projection means wants to improve light to perform a better read operation.

The differences between the claims and the teachings in the art are great since the references fail to teach or suggest all of the claim elements. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art.

For at least these reasons, the claims are allowable over the art of record.

Sub-Heading: Claim 39

As one example, independent claim 39 recites that the first and second scanning modules are synchronously translated along their respective paths in a first mode and translated along their respective paths in a second mode such that positions of their respective paths are not same at any given time. Hidetoshi teaches a scanner with two carriages 5a and 5b and states that both carriages are moved to simultaneously scan the object. Hidetoshi, however, never teaches or even suggests that these carriages also move such that positions of their respective paths are not same at any given time. Takashi fails to cure these deficiencies.

Hidetoshi provides an advantage that both carriages move at the same time to shorten the read time (see Abstract discussing the problem to be solved and the solution). For example, Hidetoshi discusses how both the first carriage 5a and the second carriage 5b move together to perform the scan. These two carriages start and stop at the same time. The first carriage reaches its end point at the same time the second carriage reaches its end point. These two carriages are not independently translatable along the displacement paths “such that positions of their respective paths are not same at any given time” as recited in claim 39.

The differences between the claims and the teachings in the art are great since the references fail to teach or suggest all of the claim elements. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art.

For at least these reasons, claim 39 is allowable over the art of record.

Sub-Heading: Claim 40

As one example, independent claim 40 recites that the first and second modules are offset from each other along their respective displacement paths to reduce bleed-through of light through the object. Neither Hidetoshi nor Takashi teach or even suggest offsetting the modules to reduce bleed-through of light through an object.

The examiner argues that Hidetoshi teaches a means to prevent back projection. Appellants respectfully disagree. The back projection means discussed in Hidetoshi is used to read the surface of the object (for example, read the surface of a paper document being scanned). This back projection means is not related to reducing bleed-through of light through the object. By contrast, the back projection means wants to improve light to perform a better read operation.

The differences between the claims and the teachings in the art are great since the references fail to teach or suggest all of the claim elements. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art.

For at least these reasons, claim 40 is allowable over the art of record.

Sub-Heading: Claim 41

As one example, independent claim 41 recites that one of said first and second scanning modules is farther along its displacement path than another of said first and second scanning modules such that a light source of the first scanning module is aligned with a photosensitive device of the second scanning module. Hidetoshi in view of Takashi does not teach or suggest these recitations.

Hidetoshi teaches a scanner having two carriages 5a and 5b. During a read operation, a CPU drives both carriages such that both sides of the object are simultaneously scanned. Hidetoshi never teaches or even suggests that one of the carriages is farther along its displacement path than the other carriage such that a light source of one carriage is aligned with a photosensitive device of the other carriage.

Even assuming arguendo that Hidetoshi teaches that the carriages move independently (which it does not), Hidetoshi never suggests that a light source of his first scanning module “is aligned with a photosensitive device of the second scanning module” as recited in claim 41 (underline added).

The differences between the claims and the teachings in the art are great since the references fail to teach or suggest all of the claim elements. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art.

For at least these reasons, claim 41 is allowable over the art of record.

Claim Rejections: 35 USC § 101

Claims 18-21 are rejected under 35 USC § 101 as not falling within one of the four statutory categories of invention. These rejections are traversed.

Principles of Law

Under 35 USC § 101, patentable subject matter must be one of processes, machines, manufacturers, and compositions of matter. Generally, several categories are not included as patentable subject matter: abstract ideas, laws of nature, mental processes, and natural phenomena.

Furthermore, in order to qualify as being patentable under section 101, the claims must be (1) tied to a particular machine or apparatus, or (2) transforms a particular article

into a different state or thing (machine-or-transformation test: see *In re Bilski*, ___ F.3d ___, 88 U.S.P.Q.2d 1385 (2008)). Transformation and reduction of an article to a different state or thing is the clue to the patentability of a process claim that does not include particular machines (see *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972)).

Further to the machine-or-transformation test, the Supreme Court held that mere field-of-use limitations are generally insufficient to render an otherwise ineligible process claim patent-eligible (see *Diamond v. Diehr*, 450 U.S. 175, at 191-92 (1981)). This avoids artful drafting of adding a technological field-of-use limitation in order to pass the § 101 threshold. The Supreme Court in *Diehr* further held that insignificant postsolution activity will not transform an unpatentable principle into a patentable process (see *Id.* At 191-192). This holding prevents a competent draftsman from attaching some form of post-solution activity to a mathematical formula (for example, Pythagorean theorem would not have been patentable, or partially patentable, because a patent application contained a final step indicating that the formula, when solved, could be usefully applied to existing surveying techniques). Furthermore, the Supreme Court has held that it is inappropriate to determine the patent-eligibility of a claim as a whole based on whether selected limitations constitute patent-eligible subject matter (see *Parker v. Flook*, 437 U.S. 584 at 594 (1978)). In other words, the patent claim should be considered as a whole since it is irrelevant that any individual step or limitation of such processes by itself would be unpatentable under § 101 (see *Diehr*, 450 U.S. at 187).

Sub-Heading: Claims 18-21

Independent claim 18 is selected for discussion.

As a whole, independent claim 18 is clearly tied to an image capture device that scans objects. The preamble and each of the steps recited in the method are directed to scanning an object with an image capture device. In fact, the term “image capture device” occurs in almost every claim element (except the last claim element which recites moving the first and second scanning modules to illuminate the object).

The term “image capture device” imposes meaningful limits on the scope of claim 18. The method steps include both functional recitations and structural components to implement such function (for example, the claim recites that the image capture device

includes first and second scanning modules). These elements impose meaningful limits on the scope of the claim. Furthermore, the involvement of the machine (i.e., an image capture device) is significant and not merely provided as extra-solution activity (see *Flook*, 437 U.S. at 590). Use of the image capture device is not post-solution activity to a mathematical formula. Instead, the image capture device performs a significant function of scanning an object

Regarding the machine implementation part of the test, the court in *Bilski* analyzed previous Supreme Court cases and stated: “A claimed process involving a fundamental principle that uses a particular machine or apparatus would not pre-empt uses of the principle that does not also use the specified machine or apparatus in the manner claimed” (see *Bilski* at 11). For example, the Supreme Court in *Diehr* allowed claims that used a mathematical equation (i.e., Arrhenius equation) since the claims did not seek to preempt use of the fundamental principle of the equation. Instead, the claims only attempted to preempt use of an application of that fundamental principle and not the fundamental principle itself (see *Bilski* at 8).

Claim 18 is not attempting to preempt use of a general principle. Instead, the claim elements explicitly recite recitations for use of scanning with a specific machine, here an image capture device. Claim 18 is directed to a specific application of the fundamental principle of scanning. In this regard, the claim recites five specific functional elements that the image capture device performs (i.e., illuminating the object with a first scanning module, capturing light by a second scanning module, illuminating the object with the second scanning module, capturing light by the first scanning module, and moving the scanning modules along their displacement paths). Given these recitations, claim 18 is clearly tied to a particular machine, here an image capture device.

For at least these reasons, Appellants respectfully ask the BPAI to reverse the rejections under section 101.

CONCLUSION

In view of the above, Appellants respectfully request the Board of Appeals to reverse the Examiner's rejection of all pending claims.

Any inquiry regarding this Amendment and Response should be directed to Philip S. Lyren at Telephone No. 832-236-5529. In addition, all correspondence should continue to be directed to the following address:

Hewlett-Packard Company
Intellectual Property Administration
P.O. Box 272400
Fort Collins, Colorado 80527-2400

Respectfully submitted,

/Philip S. Lyren #40,709/

Philip S. Lyren
Reg. No. 40,709
Ph: 832-236-5529

VIII. Claims Appendix

1. An image capture device, comprising:
a first scanning module operable to scan a first side of an object;
a second scanning module operable to scan a second side of said object, said first and second scanning modules being independently translatable along their respective displacement paths and being offset from each other along their respective displacement paths during a duplex mode to reduce bleed-through of light through the object; and
a housing, wherein one of said first and second scanning modules is disposed in said housing.
2. – 3. (Canceled.)
4. The image capture device of claim 1, further comprising a lid coupled to said housing, one of said first and second scanning modules being disposed in said lid.
5. The image capture device of claim 1, further comprising two platens operable to sandwich said object therebetween.
6. The image capture device of claim 4, said scanning module disposed in said lid being mounted on at least one support rail in said lid.
7. The image capture device of claim 1, said second scanning module disposed in said housing being mounted on at least one support rail in said housing.

8. The image capture device of claim 1, wherein said first scanning module comprises:

- a light source operable to illuminate at least a portion of said first side; and
- a photosensitive device operable to capture light reflected from said first side.

9. The image capture device of claim 1, wherein said first scanning module comprises a photosensitive device operable to capture light passing through said object.

10. The image capture device of claim 1, wherein said second scanning module comprises:

- a light source operable to illuminate at least a portion of said second side; and
- a photosensitive device operable to capture light reflected from said second side.

11. The image capture device of claim 1, wherein said second scanning module comprises a photosensitive device operable to capture light passing through said object.

12. The image capture device of claim 1, wherein said image capture device is operable to scan said object in a mode selected from the group consisting of a face-up mode, a face-down mode, the duplex mode and a transparency mode.

13. The image capture device of claim 1, wherein in a face-up mode said first scanning module scans said first side.

14. The image capture device of claim 1, wherein in a face-down mode said second scanning module scans said second side.

15. The image capture device of claim 1, wherein in the duplex mode said first scanning module scans said first side and said second scanning module scans said second side.

16. The image capture device of claim 1, wherein in a transparency mode, said first scanning module is operable to illuminate said object and said second scanning module is operable to capture light passing through said object.

17. The image capture device of claim 1, wherein in a transparency mode, said second scanning module is operable to illuminate said object and said first scanning module is operable to capture light passing through said object.

18. A method for scanning an object by an image capture device, comprising:
illuminating a first portion of said object by a first scanning module of said image capture device;

capturing light passing through said first portion by a second scanning module of said image capture device;

illuminating a second portion of said object by the second scanning module of said image capture device;

capturing light passing through said second portion by the first scanning module of said image capture device; and

moving said first and second scanning modules along their respective displacement paths to illuminate the first and second portions of said object.

19. The method of claim 18, wherein said moving comprises moving said first and second scanning modules such that a light source of said first scanning module and a photosensitive device of said second scanning module are aligned with each other.

20. The method of claim 18, wherein said illuminating comprises illuminating said first portion by a light source of said first scanning module.

21. The method of claim 18, wherein said capturing comprises capturing light passing through said first portion by a photosensitive device of said second scanning module.

22. – 28. (Canceled)

29. A system, comprising:
an image capture device, and

application logic operatively associated with said image capture device and operable to:

cause a first scanning module of said image capture device to illuminate a first portion of said object;

cause a second scanning module of said image capture device to capture light passing through said first portion; and

cause movement of said first and second scanning modules along their respective displacement paths to illuminate a next portion of said object and to capture light passing through said next portion, wherein

said application logic is further operable to cause movement of said first and second scanning modules to be synchronously translated along their respective rails in a first mode of operation and to be translated in a second mode of operation such that positions of their respective rails are not same at any given time.

30. (Canceled.)

31. The system of claim 29, said application logic further operable to cause illumination of said first portion by a light source of said first scanning module.

32. The system of claim 29, said application logic further operable to cause said capturing of light passing through said first portion by a photosensitive device of said second scanning module.

33. An image capture device, comprising:
a first scanning module operable to illuminate a first side of said object; and
a second scanning module operable to illuminate a second side of said object, said first and second scanning modules translatable along their respective displacement paths, wherein said first scanning module moves along a displacement path to illuminate the first side of said object and capture light transmitted through said object from said second scanning module, and said second scanning module moves along a displacement path to illuminate the second side of said object and capture light transmitted through said object from said first scanning module.

34. The image capture device of claim 33, wherein said first and second scanning modules are translatable such that a light source of said first scanning module and a photosensitive device of said second scanning module are aligned with each other.

35. The image capture device of claim 33, wherein said first scanning module comprises a light source operable to illuminate said first side.

36. The image capture device of claim 33, wherein said second scanning module comprises a photosensitive device operable to capture light passing through said first side.

37. The image capture device of claim 36, wherein said photosensitive device comprises at least one color filter.

38. The image capture device of claim 36, wherein said photosensitive device comprises a colored light source.

39. An image capture device, comprising:
a first scanning module operable to scan a first side of an object; and
a second scanning module operable to scan a second side of said object, said first and second scanning modules translatable along their respective displacement paths, wherein said first and second scanning modules are synchronously translated along their respective paths in a first mode and translated along their respective paths in a second mode such that positions of their respective paths are not same at any given time.

40. An image capture device, comprising:
a first scanning module operable to scan a first side of an object; and
a second scanning module operable to scan a second side of said object, said first and second scanning modules translatable along their respective displacement paths, wherein said first and second scanning modules are offset from each other along their respective displacement paths to reduce bleed-through of light through the object.

41. An image capture device, comprising:
a first scanning module operable to scan a first side of an object; and
a second scanning module operable to scan a second side of said object, said first and second scanning modules translatable along their respective displacement paths, wherein

in a transparency mode, and one of said first and second scanning modules is farther along its displacement path than another of said first and second scanning modules such that a light source of the first scanning module is aligned with a photosensitive device of the second scanning module.

IX. EVIDENCE APPENDIX

None.

X. RELATED PROCEEDINGS APPENDIX

None.